Medial Collateral Ligament (MCL) Repair With Internal/Brace™ Ligament Augmentation

Surgical Technique
Simple, Safe, and Reproducible

The MCL InternalBrace™ ligament augmentation consists of a 2 mm-wide FiberTape® suture that spans the distance between two Knotless SwiveLock® anchors in order to provide a protective reinforcement for your primary medial collateral ligament (MCL) repair that exceeds the strength of the native ligament. FiberTape sutures have been proven safe and effective with over 15 years’ experience and over 3.8 million uses, including tendon and ligament-bridging repairs.

FiberTape suture is an ultra-high-strength 2 mm-width tape using the long-chain polyethylene structure of FiberWire® suture. FiberTape suture’s broad footprint is appropriate for repairs of degenerative tissue where tissue pull-through may be a concern.

- Build in significant stability, strength, and protection to your minimally invasive primary MCL repairs

Surgical Technique

Prior to starting the InternalBrace procedure, the MCL should be repaired or have the femoral SwiveLock® sutures attached as referenced in Step 3. With the knee in neutral position, find your landmarks on the medial condyle and the posteromedial crest of the tibia.

Through the primary MCL repair incision, apply the femoral attachment of the InternalBrace implant slightly proximal (average 3.2 mm) and posterior (average 4.8 mm) to the medial epicondyle. Place the 2.4 mm guide pin (AR-13505SB) through the shoehorn cannula and drill to a minimum depth of 25 mm.
Pass one end of the FiberTape® suture through the eyelet of the first 4.75 mm BioComposite SwiveLock® anchor so that half of the suture is pulled through the eyelet. Push the anchor into the femoral socket until the eyelet is fully seated. Maintain tension on each end of the suture while holding the green paddle on the screwdriver stationary and turning the driver clockwise to screw the anchor into the femur.

**Note:** Ensure the anchor is seated flush with the cortices before removing the driver.

After removing the driver, the suture can be removed, or it can be used with a needle to repair the torn MCL if it was not repaired prior to anchor insertion.
Apply the tibial attachment of the InternalBrace™ implant just proximal to the pes anserine and 3 mm anterior to the posteromedial crest of the tibia. Place the 2.4 mm guide pin through the shoehorn cannula, and drill to a minimum depth of 25 mm.

Use a curved hemostat to pass the FiberTape® suture distally along the native MCL. To aid the passing of the FiberTape suture, a #2 FiberWire® suture can be used as a passing suture.

Wrap the FiberTape suture around the 2.4 mm guide pin, and check for isometry by going through the full range of motion (ROM). Evaluate the tracking and laxity of the FiberTape suture throughout the ROM. If any tension or positioning adjustments need to be made, make the adjustments, and then recheck for isometry.
Use the 4.5 mm cannulated reamer to drill over the guide pin to a depth of 25 mm. Tap the bone socket to the laser line on the 4.75 mm SwiveLock® tap. **Note: Incomplete tapping may compromise anchor fixation.**

Pass both limbs of the FiberTape® suture through the eyelet of the 4.75 mm BioComposite SwiveLock anchor and insert the anchor. This step occasionally requires a gentle tap with the mallet. **Note: Do not overtension. The FiberTape suture should be slightly looser than the MCL when the repair is complete.**
Place the knee joint between 0° and 20° of flexion with neutral rotation and slight varus reduction while inserting the SwiveLock® anchor fixation. Maintain tension on each end of the FiberTape® suture and screw the anchor into the tibia. Remove the driver and then remove the suture. Close the wound according to surgical preference.

Final fixation.
Ordering Information

**MCL InternalBrace™ Kit (AR-5511-CP)**

<table>
<thead>
<tr>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BioComposite SwiveLock® Anchor, 4.75 mm × 15 mm, qty. 2</td>
</tr>
<tr>
<td>Shoehorn Cannula</td>
</tr>
<tr>
<td>Cannulated Drill Bit, 4.5 mm</td>
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<tr>
<td>Guide Pins, 2.4 mm × 8 in, qty. 2</td>
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<tr>
<td>SwiveLock Punch/Tap, disposable, 4.75 mm</td>
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<tr>
<td>FiberTape® Suture, 17 in</td>
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<tr>
<td>#2 FiberWire® Suture, qty. 2</td>
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Products may not be available in all markets because product availability is subject to the regulatory approvals and medical practices in individual markets. Please contact your Arthrex representative if you have questions about the availability of products in your area.

Reference

This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's directions for use. Postoperative management is patient-specific and dependent on the treating professional’s assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes.

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